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| 09/630,557   | 08/02/2000  | Keiichi Nakajima     | P 271790 NI-0005PCTUS | 9517             |
| 909  | 7590        | 02/27/2006           | EXAMINER              |                  |
| PILLSBURY WINTHROP SHAW PITTMAN, LLP<br>P.O. BOX 10500<br>MCLEAN, VA 22102 |             |                      | KYLE, CHARLES R       |                  |
|  |             |                      | ART UNIT              | PAPER NUMBER     |
|  |             |                      | 3624                  |                  |

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/630,557

Applicant(s)

NAKAJIMA, KEIICHI

Examiner

Charles Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 11-13 and 54-85 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 11-13 and 54-85 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## ETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 2, 11-13 and 54-85** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 54** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. They recite the phrase “being connectable”, which makes it unclear whether a connection actually exists. The possibility of connection is not the same as connection.

**Claims 54 and its dependent Claims** recite the phrase “a synchronizing server which performs the settlement of a transaction by synchronizing a communication with the paying terminal...” and variations thereon. The concept of “synchronizing” is unclear. It appears that “synchronizing” is intended to be some form of authentication of the billing and paying terminals to each other and this is assumed for purposes of examination. This assumption is supported by Applicants’ Specification at page 4, which states “the billing terminal and the paying terminal, both of which are synchronized with each other by the transaction identifying number”.

Synchronous operation is understood in computer engineering to be operation under control of a system clock. A thorough review of the Specification shows no reference to a clock or timing pulse, common concepts with synchronization of computers in a network. The Specification is replete with references to synchronizing, but provide no clarification as to what

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is meant by the Claims. Occurrences of the concept which might provide clarity are merely circular, (e.g. at page 4, which refers to "a synchronization confirmation signal which indicates establishment of synchronization) and leave all references to the concept of synchronization vague and indefinite. These comments apply to all Claims discussed in the rejections directly below as well.

**Claims 71 and its dependent Claims and Claims 84-85** recite the phrase "a processing unit (or module) for performing the settlement of the transaction by synchronizing a communication with the paying terminal..." and variations thereon. The concept of "synchronizing" is unclear. It appears that "synchronizing" is intended to be some form of authentication of the billing and paying terminals to each other and this is assumed for purposes of examination. This assumption is supported by Applicants' Specification at page 4, which states "the billing terminal and the paying terminal, both of which are synchronized with each other by the transaction identifying number".

**Claims 2, 11-13 and 54-83** recite the phrase an "electronic settlement system for setting up a transaction" or "a transaction apparatus for setting up a transaction". The concept of "setting up a transaction" is unclear

Applicant has set forth argument at page 10 of Remarks; the logic of the argument is circular, in that a synchronized communication is via "the synchronizing server...". This provides no clarification of what is meant by use of the concept of synchronization. Applicant attempts to clarify the language with use of the phrase "one-to-one" which is similarly unclear and provides grounds for rejection of all Claims. Applicant's explanation of sequential processes is further obvious and known in computer arts. Applicant fails to address the Examiner's

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comments on synchronous operation as set forth above and in the prior office action. The language as presented appears to be a transliteration from a foreign language, lacking the clarity and nuance of a clear translation.

**Claims 64 and 79** recite the phrase "and/or" which is unclear because one does not know whether all identifying characteristic (facial portrait, voice...) are required limitations, or just one. For purpose of examination, the alternative, or, is assumed.

**Claims 69, 70, 82 and 83** recite the phrase "wherein the authentication method is instructed by the user". "Instructed" suggests teaching; it is unclear how an authentication method could be taught *anything* by a user. The lack of clarity in these Claims precludes application of any art in a rejection.

**Claims 54 and its dependent Claims** recite the limitation "the synchronized paying terminal". There is insufficient antecedent basis for this limitation in the claim.

**Claims 54 and its dependent Claims** recite the limitation "the synchronized billing terminal". There is insufficient antecedent basis for this limitation in the claim.

The Claims have been examined to the best of the Examiner's ability given the state of the Claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 54, 71 and 84** are rejected under 35 U.S.C. 102(e) as being anticipated by US

2002/0073046 *David*.

**Concerning Claim 54**, *David* discloses the invention as claimed, including in an electronic settlement system for setting up a transaction through a communication network, elements of:

a paying terminal (para. 51) for purchasing an item by a user thereof (para. 22), the paying terminal including an input unit for inputting authentication information of the user and being connectable to the communication network (Fig. 5, "PC at Home" having a keyboard);

a billing terminal for charging the user of the paying terminal a purchase amount, the billing terminal being connected to the communication network (para. 52);

a paying terminal database for storing authentication information of the user (para. 76); and

a synchronizing server (Fig. 6, "ISP Server"; paras. 61-64, 134) which performs the settlement of the transaction by synchronizing a communication with the paying terminal and the billing terminal one-to-one when receiving a transaction ID information from one of the paying terminal and the billing terminal (para. 137), the synchronizing server sets an authentication method to be processed between the synchronized paying terminal and the synchronized billing terminal (Background and Summary of the Invention) wherein one of the synchronizing server and the billing terminal authenticates

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the user in accordance with the authentication information stored in the paying terminal database (para. 76).

See also Figs. 6-8 and related text.

**With respect to Claim 71**, see the discussion of Claims 54; the first and second communication units read on the paying and billing terminals of Claim 54 and the processing unit reads on the “synchronizing” server of Claim 54.

**With respect to Claim 84**, see the discussion of Claims 54 and 71; similar reasoning applies. *David* further discloses a recording medium at paras. 76 and 112, at least.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4, 11-13, 55-60, 64-68, 72-74, 76 and 79-81** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0073046 *David* in view of US 6,332,133 *Takayama*, already of record.

**Concerning Claim 4**, see the discussion of Claim 54. *David* does not specifically disclose that the billing terminal communicates over a telephone line or that the paying terminal connects to the settlement apparatus by radio telephone communications. *Takayama* discloses that the billing terminal communicates over a telephone line at Fig. 1, eles. 110,109. *Takayama*

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further discloses that the paying terminal connects to the settlement apparatus by radio telephone communications at Col 43, line 59 to col. 44, lines 29. It would have been obvious to one of ordinary skill in that art at the time of the invention to modify *David* to use the radio telephone technology of *Takayama* because this would increase buyer mobility.

**Concerning Claims 11-13**, *David* does not specifically disclose a purchase history. *Takayama* discloses a purchase history at Col. 71, lines 26-58. It would have been obvious to one of ordinary skill in that art at the time of the invention to modify *David* to include the purchase history of *Takayama* because this would keep parties to transactions apprised of buyers' purchasing activities.

**As to Claim 55**, *David* further discloses a request signal from one of a paying and billing terminal and transmission of a transaction identifier at paras. 28, 137 and 144-145. *David* does not specifically disclose that data from the paying and billing terminals are compared by a central sever to authenticate (synchronize?) communications between the terminals. *Takayama* discloses this limitation at Col. 81, line 15 to Col. 82, line 24, particularly, Col. 81, line 58 to Col. 82, line 3. It would have been obvious to one of ordinary skill in that art at the time of the invention to modify *David* to include the authentication by compared data of *Takayama* because this would assure that all parties to the transaction showed the same *bona fides* and were therefore properly authenticated.

**Claims 56** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0073046 *David* in view of US 6,332,133 *Takayama*, already of record and further in view of US 6,282,522 *Davis et al.*



**With respect to Claim 56,** *David* discloses the invention substantially as claimed. See the discussion of Claim 54. *David* does not specifically disclose storage of authentication methods and an agreeable authentication method identified by a “synchronizing” server. *Davis* discloses these limitations at Abstract, Figs. 4-8, Figs, 10-13 and related text. It would have been obvious to one of ordinary skill in that art at the time of the invention to modify *David* with the limitations disclosed by *Davis* because this would provide a *lingua franca* of common and mutually understood authentication among parties.

**As to Claim 57,** *Takayama* suggests agreeable authentication at Col. 71, lines 15-40, as selection from among several credit cards, each requiring different authentication (eg., expiration date).

**Concerning Claim 58,** *David* does not specifically disclose consolidation of data. Official Notice is taken that consolidation of functionality, storage in this case, was old and well known at the time of the invention. For example, centralization of database information was commonly performed to avoid duplication of equipment and staff. It would have been obvious to one of ordinary skill in that art at the time of the invention to modify *David* with such a consolidation of databases for purposes of efficiency and security.

**With respect to Claim 59,** *David* discloses use of a password at Summary of the Invention, at least.

**As to Claim 60,** see the discussion of Claim 57, and it is inherent that the type of authentication would depend on the payment method chosen. For example, a debit card would require authentication such as a PIN, while a credit card would require authentication such as the

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card expiration date; different credit cards such as those of *Takayama* would each require a different expiration date for authentication.

**Concerning Claim 64**, *David* discloses a fingerprint at Summary of the Invention; *Takayama* discloses a user cell telephone receiving voice input at Fig 2A.

**With respect to Claims 65 and 66**, *Davis* discloses a cashier terminal at a retailer and Internet shopping at Col. 3, lines 13-25.

**Concerning Claim 67**, *David* does not specifically disclose selection of more accurate authentication. Official Notice is taken that such a selection is old and well known in transaction security. For example, less accurate authentication would increase risk of loss. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Takayama* to select more accurate authentication to reduce risk of loss through fraud. Applicant's Remarks provide no substantive argument against this reasoning.

**Concerning Claim 68**, *David* discloses refusal to authenticate at para. 161.

**With respect to Claims 72-74, 76 and 79-81**, see the discussion of Claim 71 and Claims 55-56, 59, 60, 79, 65, and 66 respectively.

**Claims 61-63, 75 and 77-78** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0073046 *David* in view of US 6,332,133 *Takayama*, already of record and further in view of US 6,282,522 *Davis et al* and further in view of *Electronic Payment systems*, hereinafter, *O'Mahony*.

**With respect to Claim 61-62, 75 and 77**, *David* discloses the invention substantially as claimed. See the discussion of Claim 54. *David* does not specifically disclose specification of

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authentication methods based on price. *O'Mahony* discloses this limitation at page 63, bracketed text. It would have been obvious to one of ordinary skill in that art at the time of the invention to modify *David* to include such stepped authentication to most effectively require authentication for relatively higher value transactions.

As to Claims 63 and 78, it would have been obvious to allow the authentication server/processing unit to act as an arbiter when no other entity specifies authentication, so as to provide at least a minimal level of authentication.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection or are addressed in the rejections above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kyle whose telephone number is (571) 272-6746. The examiner can normally be reached on 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (571) 272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

crk  
February 21 2006

**Primary Examiner**  
**Charles Kyle**  
**Art Unit 3624**

